

**ABSTRACT**

Well bore servicing fluids are provided that include a thermally activated viscosification compound. Further, methods of servicing a well bore are provided that include displacing such a servicing fluid into the well bore, wherein a viscosity of the servicing fluid increases as it passes down the well bore due to its temperature increasing. Thus, the viscosity of the servicing fluid is effective to suspend solids therein when the servicing fluid is in the well bore. The servicing fluid may be, for example, a cement slurry, a drilling fluid, a gravel packing fluid, a fracturing fluid, a completion fluid, or a work-over fluid. In an embodiment, the thermally activated viscosification compound includes at least one water-soluble hydrophobically modified polymer comprising a hydrophobic substituent having from about 1 to about 22 carbon atoms.